



**S1 Fig. The experimentally observed frequency distribution of plaques in the plaque assay follows a Poisson distribution.** Depicted are plaque assay data from three independent experiments carried out on different days in which serially diluted 3D7 *P. falciparum* cultures (0.75% haematocrit) were cultured in flat-bottomed 96-well microplates as described in Materials and Methods. Plaques were enumerated at 14 days and mean values ( $\lambda$ ) calculated. Experimentally observed plaque frequency values are shown plotted (blue) alongside the expected frequency values of a Poisson distribution with the same mean value (red). Chi-squared goodness-of-fit tests showed no significant deviation of observed distributions from the expected distributions. Chi-squared ( $\chi^2$ ) values, number of degrees of freedom (d.f) and p-values are indicated in each case. Note that for the purpose of statistical analysis, those categories where expected values were less than 5 were pooled to create a single category.